May 29, 1962 E. N. SCHUSTER 3,036,316

BATHING CHAIR

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FIG. 1

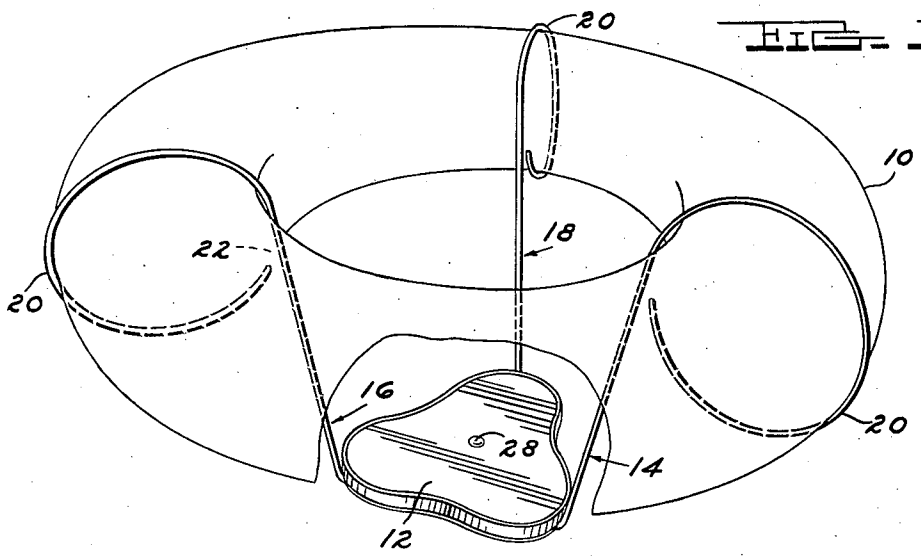



FIG. 3

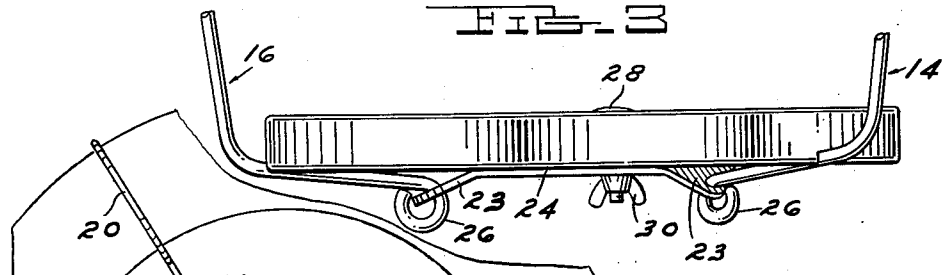
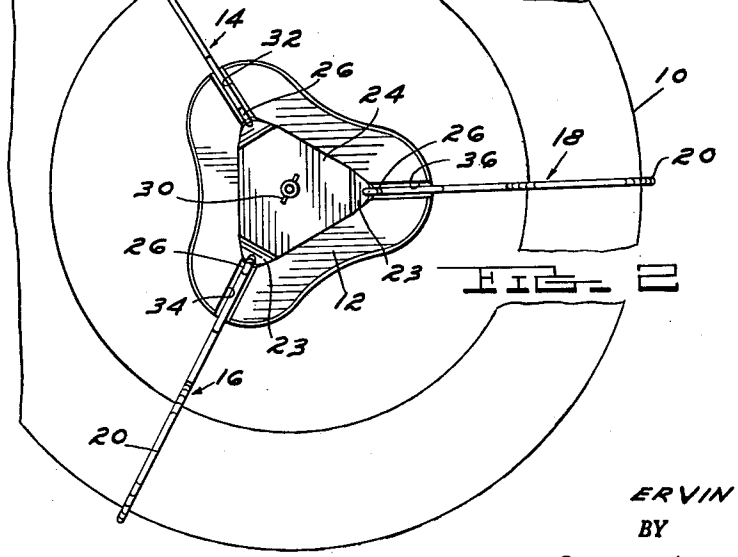



FIG. 2




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FIG. 7

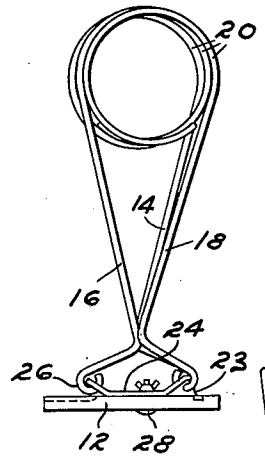



FIG. 5

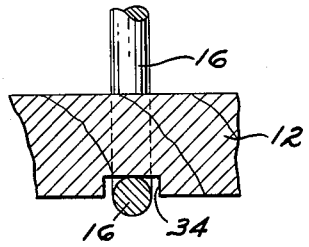



FIG. 4

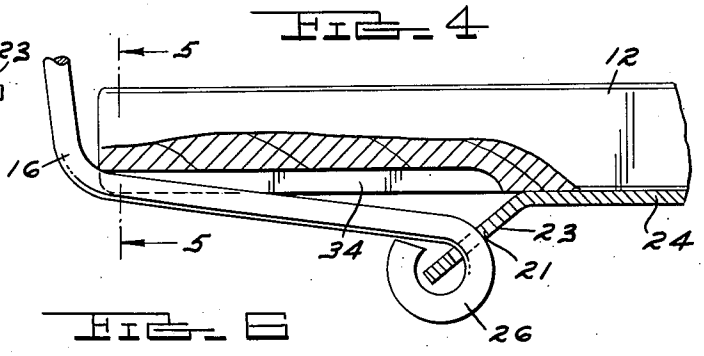
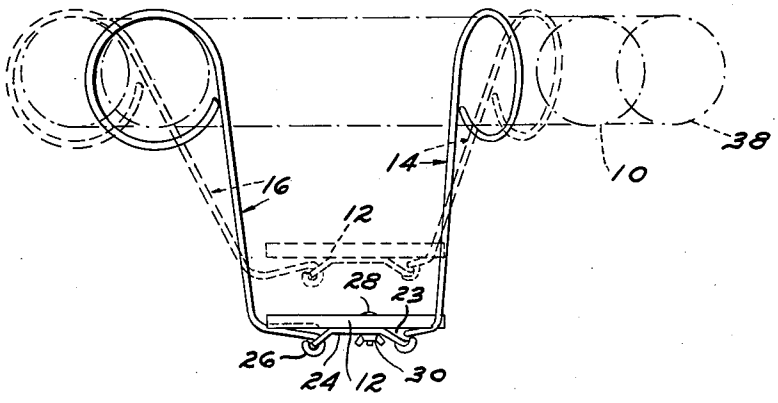



FIG. 6




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# BATHING CHAIR

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12 Claims. (Cl. 9—347)

This invention relates to an aquatic amusement device, and more particularly to an improved bathing chair for use with an inflatable tubular body to safely and comfortably support a person in the water.

An object of the present invention is to provide an improved bathing chair which is economical to manufacture and convenient, durable and safe in use.

Another object is to provide an improved bathing chair of the above character which is adjustable to various sizes of inflatable tubular bodies.

A further object is to provide an improved bathing chair of the above character which is detachable from the inflatable tubular body and when so detached is collapsible into an easily carried compact arrangement.

Still another object is to provide an improved bathing chain adapted for quick conversion to use as a beach chair.

In the accompanying drawings:

FIG. 1 is a perspective view of the bathing chair of the present invention suspended from an inflated inner tube having a portion thereof broken away to illustrate the chair.

FIG. 2 is a bottom plan view of the bathing chair suspended from the inner tube.

FIG. 3 is a fragmentary side elevational view of the seat and suspension structure of the bathing chair.

FIG. 4 is an enlarged fragmentary side view of one corner of the bathing seat and suspension structure therefor, with a portion of the seat broken away to illustrate details.

FIG. 5 is a fragmentary cross sectional view taken on the line 5—5 of FIG. 4.

FIG. 6 is a side elevational view of the bathing chair illustrating the adjustability thereof to two different sizes of inner tubes.

FIG. 7 is a side elevational view of the bathing chair turned upside down with the suspension arms pivoted together into the transport and storage position of the chair.

Referring to FIG. 1, the bathing chair of the invention is shown suspended from an annular inflated tubular body 10 such as an inner tube of an automobile tire. The bathing chair comprises a seat 12 supported below the center of inner tube 10 by three identical suspension arms 14, 16 and 18. The upper portion of each arm 14, 16, 18 is curved into a loop 20 designed to fit around the largest diameter inner tube customarily used in water sports. The upper ends of the arms in loops 20 are spaced from an intermediate straight portion of the arms to provide a gap 22 which is just large enough to permit passage therethrough of the inner tube when it is deflated, thereby insuring that the bathing chair cannot become detached from the inner tube so long as the same is inflated.

As shown in FIGS. 2 and 3, the lower end of each arm 14, 16, 18 is bent inwardly in the plane defined by the straight portion and loop thereof so as to extend under seat 12. The bottom ends of arms 14, 16, 18 pass through a hole 21 (FIG. 4) punched in the center of a downwardly bent corner 23 of a triangular plate 24, the ends of the arms then being reversely bent back on the arm to form a hook eye 26. This connection of the arms to the corners of plate 24 permits universal movement therebetween so that the arms are pivotably connected to seat 12. Plate 24 and seat 12 are each provided with a center hole through which a smooth headed bolt 28 is inserted, the plate and seat being clamped together by a wing nut 30 threadably received on the lower end of bolt 28.



As best seen in FIG. 2, plate 24 is preferably a metal stamping in the shape of an equilateral triangle approximately half the size of seat 12. The seat is preferably made from softer material such as wood or plastic which is cut generally in the shape of an equilateral triangle having convex corners with concave sides therebetween to form a symmetrical contour for comfortably supporting a bather in any of three sitting positions thereon. The undersurface of seat 12 is provided with three radial grooves 32, 34 and 36 which extend inwardly from the corners of the seat to a point opposite the bent down corners 23 of plate 24 (FIG. 4). Grooves 32, 34 and 36 respectively receive the inwardly bent portions ef arms 14, 16 and 18 when the chair is suspended from inner tube 10 and serve to hold the arms in radially extending positions at 120 degree spaced intervals around the seat. Ordinarily, when a full sized inner tube is used, the friction of the loops 20 of the arms is sufficient to maintain the arms equally spaced apart. However, the grooves become very helpful when a smaller diameter tube is used which does not completely fill the loops. Thus, regardless of the size of the tube, there is no danger of the stability of the seat being endangered by a pair of the arms working closer together around the inner tube.

Referring to FIG. 6, the bathing chair of the present invention is shown in solid lines suspended from inner tube 10, and is shown in broken lines suspended from a larger inner tube 38. It will be seen that the pivotal connection of suspension arms 14, 16, 18 from metal plate 24 allows the arms to pivot in a vertical plane from a substantially upright position for smaller diameter inner tubes to an outwardly inclined position for large diameter inner tubes, the elevation of seat 12 beneath tube 10 being determined accordingly. It is to be understood that the supporting arms 14, 16, 18 are preferably constructed of ¼ inch diameter ductile metal rods or other suitable material so that the shape of the arms and loops 20 thereof does not change in use. The weight of plate 24 and suspension arms 14, 16, 18 is sufficient to offset the buoyancy of wooden seat 12 so that the bathing chair will hang fully suspended below the inner tube when it is in the water with no tendency to rise upwardly or become tangled in the legs of the person using the device.

In order to install the bathing chair on an inner tube, the suspension arms 14, 16 and 18 are first pivoted to the position of FIG. 1 with plate 24 placed on the ground or other supporting surface. Inner tube 10 in a partially or preferably completely deflated condition is then pulled through the gap 22 of each loop 20 until the tube passes through all the loops so as to encircle the chair. The tube is then inflated so that it completely fills each loop 20. A person using the chair in the water enters the inner tube from above and inserts his legs through the space between the seat and the inner tube so that the person is seated on seat 12 with one of the arms between his legs. The chair can be entered and used in any of three positions due to the symmetrical triangular contour of seat 12 and the equal 120° spacing of suspension arms 14, 16 and 18 relative thereto. The three-arm suspension and the position of seat 12 spaced well below the bottom of the inner tube contribute to the stability of the bathing chair in the water.

To transport the bathing chair when not in use, inner tube 10 is first deflated and then removed from the loops 20. Then the bathing chair is turned upside down as in FIG. 7 and the arms pivoted upwardly in vertical, radial planes until loops 20 are almost together. Then, due to the universal pivotal connection of the arms with plate 24, the arms may be individually rotated about vertical axes so that, for example, arms 14 and 18 are disposed in substantially parallel planes in side-by-side relation with loop 20 of arm 16 therebetween. The loops 20 thus nest

together in side-by-side compact relationship to form a circular handle for carrying the bathing chair. The transport arrangement of the arms is also advantageous for storing the bathing chair since it occupies considerably less space when folded in this arrangement.

The bathing chair may also be used as a beach stool. This may be accomplished without the use of an inner tube by merely turning the bathing chair right side up from the folded storage position thereof indicated in FIG. 7. The loops **20** while still folded together are then buried in the sand of the beach and hence cannot spread apart under the weight of the person sitting on the seat. In locations where it is not possible or convenient to so anchor the loops to form a one-legged stool, the bathing chair may be converted to a three-legged stool by connecting it to an inflated tube as in FIG. 1, but with it turned upside down (FIG. 2 then becoming a top plan view) so that the inner tube is against the ground. It is a simple matter to then unbolt seat **12** and rebolt it to the other, and now upper, side of plate **24**. In this arrangement the inner tube keeps the leg-arms **14, 16, 18** from spreading further apart under the weight of a person sitting on seat **12**.

In addition to the above features, the bathing chair is simple to construct since only seven pieces including the two-piece fastener are required, three of these pieces comprising the suspension arms being identical in shape and thus economical to manufacture. The use of the triangular metal linkage plate **24** between the bottom hooked ends **26** of the suspension arms provides a strong supporting structure for seats **12** made of various materials, such as plastic or soft rubber, in lieu of the illustrative wooden symmetrical contour seat disclosed herein. The pivotal connection of the arms to the seat structure, in addition to providing collapsibility, makes it possible to fit various sizes of inner tubes so that persons of all heights and ages can be supplied by manufacturing only an infant model and an adult model of the bathing chair.

I claim:

1. A bathing chair for use with a buoyant body, said bathing chair comprising a rigid plate, a rigid seat member adapted to be mounted thereon and extending beyond the periphery of said plate to provide a marginal portion therearound, and a plurality of suspension members comprising metal rods pivotally connected to said rigid plate at spaced intervals relative to one another around the periphery of said rigid plate, said suspension members each having a portion extending adjacent said marginal portion of said seat member and being bent around the outer edge thereof so as to extend upwardly therefrom for connection to the buoyant body.

2. A bathing chair for use with a buoyant body, said bathing chair comprising a rigid plate, a seat member adapted to be removably mounted on said plate and a plurality of suspension members connected to said rigid plate such that said seat member may be mounted on either side of said plate without requiring connection of said seat member to said suspension members, said suspension members extending from said plate at spaced intervals relative to one another around the periphery of said seat member for receiving the legs of a bather therebetween, said suspension members each having a portion spaced from said connection with said plate adapted to be connected to the buoyant body whereby said seat means is suspendably spaced below the buoyant body to provide a bathing chair for use in the water, said plate and said suspension members being sufficiently rigid so that when inverted with said plate spaced above said buoyant body a chair is thereby provided having sufficient strength for use out of the water.

3. A bathing chair for use with an annular buoyant body, said bathing chair including three suspension arms each having upper ends adapted to be connected to the annular body substantially at 120 degree intervals relative to one another around the perimeter of the body, and



seat means adapted to support a bather in a sitting position thereon, said seat means including a triangular metal plate having a hole in each of the corners thereof, said suspension arms each having lower ends with one of said lower ends received through each of said holes, said lower ends being hook shaped to provide a universal pivotal connection thereof to said plate whereby said plate provides a rigid interconnection between said suspension members so that said seat means is suspendable below and centrally of the annular body to provide a stable bathing chair which can be entered and used in any of three positions and so that said members are collapsible when removed from said buoyant body.

4. A bathing chair for use with an annular buoyant body, said bathing chair including three self-supporting suspension arms each having an upper end in the form of a parted loop adapted to substantially encircle the buoyant body for removably connecting the arms thereto substantially at 120 degree intervals relative to one another around the periphery of the body, and seat means adapted to support a bather in a sitting position thereon and including a rigid triangular metal supporting plate, said suspension arms each having a lower end pivotally connected to a corner of said plate whereby the lower ends of said arms are interconnected in spaced relation with one another by said plate to receive a bather therebetween when said seat means is suspended below and centrally of the annular body to provide a stable bathing chair which can be entered and used in any of three positions, said looped upper ends of said suspension arms providing a transport handle when said arms are detached from the buoyant body and pivoted from above said plate to the underside thereof and into side-by-side relation.

5. A bathing chair for use with an annular buoyant body, said bathing chair including three suspension arms each having upper ends adapted to be connected to the anular body substantially at 120 degree intervals relative to one another around the perimeter of the body, and seat means adapted to support a bather in a sitting position thereon, said seat means including a triangular metal plate having corners bent downwardly at an angle from the side of said plate facing the annular buoyant body, said suspension members each having lower ends with one lower end being pivotally connected to each of the corners of said plate to thereby rigidly inter-connect said suspension members, said seat means also including a seat member adapted to be removably mounted on said facing side of said plate and extending radially beyond the periphery of said plate to provide a marginal portion therearound, said seat member having grooves in the surface of said marginal portion thereof disposed adjacent said corners of said plate adapted to respectively receive a portion of one of said suspension members to thereby maintain said suspension arms spaced at said intervals relative to one another when said bathing chair is suspended from the buoyant body, said suspension arms being pivotable out of said grooves when detached form said buoyant body to permit universal movement thereof relative to said plate for folding the arms together in a compact arrangement for transporting and storing the chair.

6. A bathing chair adapted for suspension beneath a buoyant body, said bathing chair comprising a seat having a face adapted to support a bather in a sitting position and a plurality of self-supporting suspension members each articulately connected to said seat so that said members extend therefrom at angularly spaced intervals relative to one another around the periphery of said seat for receiving the legs of a bather therebetween, said members each having a portion spaced from said articulate connection with said seat adapted to be removably connected to the buoyant body, said articulate connections of said members to said seat being adapted to permit each of said members to pivot freely in a direction radially of the

periphery of said seat between a suspension position wherein said members are inclined radially upward from said face of said seat for connection with the buoyant body and a nested storage position on the side of said seat opposite said face thereof when said members are disconnected from the buoyant body.

7. The combination set forth in claim 6 wherein said portion of said members adapted for removable connection to the buoyant body comprises a parted loop adapted to substantially encircle the buoyant body, said looped portions of said suspension members providing a transport handle when said members are nested together in said storage position thereof.

8. The combination recited in claim 2 wherein said suspension members are pivotably connected to said plate to provide a bathing chair adjustable to fit various sizes of buoyant bodies.

9. The combination recited in claim 2 wherein said suspension members are pivotably connected to said plate for universal movement relative thereto when detached from the buoyant body whereby said suspension members are foldable together in side-by-side relation to provide a compact arrangement thereof for transporting and storing the bathing chair.

10. The combination recited in claim 9 wherein said seat member extends beyond the periphery of said plate to provide a marginal portion therearound for limiting



said pivotal movement of said suspension members in planes transverse to said plate.

11. The combination recited in claim 10 wherein said marginal portion of said seat member has grooves therein each adapted to receive one of said suspension members in a position thereof adjacent said seat member to thereby maintain the spacing between said suspension members in the suspended position of said bathing chair below the buoyant body, said suspension members being pivotable out of said grooves when detached from the buoyant body to permit said universal movement thereof for folding said members together.

12. The combination recited in claim 4 wherein said seat means includes an equilateral triangular seat removably mounted on said plate and having convex corners overlapping said plate and concave sides intermediate said corners, said lower ends of said arms being connected to said plate adjacent said corners of said seat to provide a three-way seat adapted to conform to the legs of a person sitting thereon in any of the three positions.

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